

**Amendments to the Specification**

DF 8/20/09  
Please replace the paragraph beginning at page <sup>31</sup>~~29~~, line 5, (i.e., the Abstract) with the following rewritten paragraph:

Identifier information is generated for a user interface element of interest within a user interface of a computer program based on a description of a hierarchical element path comprising, e.g., some combination of parent elements that the user interface element inherits from, class names of user interface elements, module names of application programs in the element path, and sibling order information. Process identifiers may also be added to distinguish between user interface elements of two different process instances of the same program. Unlike more fragile identifiers, such an element path identifier persists across instances of the computer program, across different computers, across different builds of the program, etc. Converting between a user-defined data type and a string type and vice versa also is provided.

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Please replace the paragraph beginning at page <sup>14</sup>13, line <sup>3</sup>20, with the following rewritten paragraph:

FIG. 8 illustrates an exemplary tree structure representation 800 that is representative of a user interface. The UI element of interest labeled '7' 805 may be persistently identifiable via an element path description that comprises identifier information related to the UI element of interest 805 as well as its direct and indirect parent elements. Thus, the combination of parent elements '1', '2', '3', '4', '5', and '6' (801-[[803]]806) may form an element path 815 which can be used to provide a persistent identifier for the UI element of interest 805.

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Please replace the paragraph beginning at page <sup>14</sup>13, line <sup>10</sup>27, with the following rewritten paragraph:

FIG. 9A illustrates an exemplary data structure for storing element path identifier information corresponding to the element path 805815 of FIG. 8. An element path description identifier 900 may comprise nodes '1-7' 910 correspondingly associated with identifiers 'A-G' 920. As shown in FIG. 9B, each of the identifiers 'A-G' 920 may comprise fields such as control ID 921, control class name 922, module name 923 etc., as described above. Other identifiers as appropriate may be provided that can further help distinguish each UI element over other UI elements. As noted above, one factor determinative of what information may be exposed at each node of a tree structure representation of a user interface may be the user interface platform used to create the individual UI element.

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Please replace the paragraph beginning at page 18, line <sup>30</sup>9, with the following rewritten paragraph:

The method of recording an element path identifier for a source UI element (e.g., the methods of FIGS. 3 and 5) may be implemented using API software components (e.g., 725) including function calls that client programs 720 can call on the element path engine 710. The same may apply to methods of searching for a target UI element (e.g., FIGS. 4 and 6) based on its element path identifier (e.g., FIGS. 9B and 11).